

# MSFC Safety Bulletin

## 1/2-Inch Brass Relief Valves Have Temperature Rating Error

### Low-Temperature Brass Relief Valves

Pipe Adapter



Relief Valve

- Set Pressure: See "To Order"
- Temperature Range: -320° to +400° F

Designed for use in the gaseous state of cryogenic systems, these brass valves are well-suited for most inert gases, oxygen, and carbon dioxide. Body is brass. Disc is fluorosilicone for set pressures below 150 psi; PTFE for set pressures 150 psi and above. Each valve is cleaned and packaged for oxygen service.

**Inlet Connection:** NPT male bottom inlet.

**Outlet Connection:** Pipe adapters are available to connect to top outlet. Adapter for the 1/4" inlet size provides a 3/8" NPT female outlet. Adapter for 1/2" inlet size provides a 1/2" NPT female outlet.

**To Order:** Please specify set pressure:

**For 1/4" inlet:** 22, 35, 50, 75, 100, 150, 235, 300, 400, or 450 psi. **For 1/2" inlet:** 50, 75, 100, 125, 200, 350, 400, or 450 psi.

### What Happened?

- In July, 2004, MSFC purchased ten low-temperature brass relief valves for 1/2-inch pipe, with a set pressure of 50 psi.
- The vendor, McMaster-Carr, notified MSFC that the catalog **incorrectly states that the valve's maximum temperature rating is 400° F.**
- The valve manufacturer states that **the true maximum temperature rating is only 165° F.**
- The McMaster-Carr website indicates that Part Number 49315K182 (rated at 165° F) is equivalent to Part Number 49315K62 (rated at 400° F, see above).

### What Can Be Done?

- Check to see if any of these valves are in service or stored stock for your operation.
- Correct the labeling of maximum temperature rating on stored stock.
- **For valves in service, if the application exceeds 165° F, immediately stop using the valve.**
- Contact McMaster-Carr at (630) 782-3949 for valve return and replacement instructions.